MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. BOX 176 JEFFERSON CITY, MO 65102

## **DRY CLEANER REGISTRATION**

I. DRY CLEANER INFORMATION (BOTH)						
DRY CLEANER FACILITY NAME		FIPS COUNTY	PLANT NO.	COUNTY	YEAR	
		NO.			2003	
FACILITY STREET ADDRESS		CITY				
The state of the s		CITY		STATE	ZIP CODE	
FACILITY MAILING ADDRESS(IF DIFFERENT FROM ABOVE)		CITY	CITY		ZIPCODE	
FACILITY CONTACT PERSON		TITLE		FACILITY P	FACILITY PHONE NUMBER	
II. PROPERTY OWNER INFORMATION (not busin	ness owner	uniess also pro	perty owner	(HWP))		
NAME OF PROPERTY'S LEGAL OWNER						
MAILING ADDRESS; STREET,P.O. BOX OR ROUTE NUMBER				OWNER PH	OWNER PHONE NUMBER	
MAILING ADDRESS; CITY OR TOWN				STATE	ZIP CODE	
III. CALCULATE SOLVENT USE (BOTH)						
III. OACOLAIL OOLILAI OOL (BOIN)	CHLORINAT	ED (para)	NON CULO	NON-CHLORINATED (non-perc)		
GALLONS ON HAND FROM PREVIOUS YEAR		CHLONINAI	ED (perc)	NON-CHLO	RINATED (non-perc)	
GALLONS BROUGHT ON SITE DURING CALENDAR	YFAR (+)				<del></del>	
GALLONS SENT OFF-SITE UNUSED (-)		<del></del>		<del></del>		
GALLONS ON-HAND AT END OF CALENDAR YEAR	(-)					
(a) TOTAL GALLONS USED DURING CALENDAR YEA						
BASED ON "TOTAL GALLONS USED DURING	CALENDAR	, CALCULATE Y	OUR SURCHA	RGE IN SECTIO	N IV BELOW	
IV. CALCULATE REGISTRATION SURCHARGE. I COMPLETION AND SUBMITAL OF THIS FORM	PLACE AND	"X" IN APPROI	PRIATE BOX.	(HWP)		
THIS SURCHARGE IS R \$ 500	SOLVENT OR ED SOLVENT ( ATED SOLVEN THE DRY CLE	O-1,400 GALLONS OR 1,401-3,600 GA T OR OVER 3,600 ANER REGISTRAT	S OF NON-CHLC LLONS OF NON GALLONS OF NO ION SURCHARG	PRINATED SOLVE -CHLORINATED S ON-CHLORINATEI E	SOLVENT. D SOLVENT.	
PAYMENT FOR REGISTRATION SURCHARGE V. CALCULATE AIR EMISSIONS FEE (APCP)	MARKED IN A	ABOXA, BORCIM	IUST BE SENT V	VITH THIS COMPL	ETED FORM.	
WHAT TYPE OF SOLVENT DOES YOUR FACILITY USE?	GALLONS	OF SOLVENT SHIP	PED AS WASTE			
☐ PERCHLOROETHYLENE (HAPs)						
STODDARD (VOC) OTHER (NAME	NUMBER OF FILTERS? TIMES THE CONV GALLONS OF SLUDGE? TIMES THE CONV			ONVERSION FAC	VERSION FACTOR = {b}   VERSION FACTOR (0.1) {c}	
OTHER (NAME)	<u>′</u>			ONVERSION FAC	TOR (0.1) {c	
[a - b - c] X DENSITY OF SOLVENT		TY OF TWO SOLV C = 13.547 LBS;/G/		1		
2000 POUNDS PER TON TOTAL ANNUAL EMISSIONS FEE		)ARD = 6.316 LBS./	GAL		TONS/YF	
		E TON MINIMUM IS USED TO CALCULATE FEES. 2			<b>_</b> \$	
VI. CERTIFICATION AND CHECK INFORMATION	(POTU)	SEE INSTRUCTION)				
The undersigned hereby certifies that they have personally examined and are	familiar with the in	formation and statemen	ts contained herein a	and further certifies that	they believe this information an	
The undersigned certifies that known	owingly making a fa	alse statement or misrep	resenting the facts pro	esented in this documer	nt is a violation of state law.	
PRINT NAME OF PERSON COMPLETING FORM TITLE				STRATION SUR	CHARGE ,	
•		CHI	ECK AMOUNT	CHECK DATE	CHECK NUMBER	
SIGNATURE	DATE	<del></del>				
				EMISSION FE		
PRINT NAME OF AUTHORIZED COMPANY REPRESENTATIVE	TITLE	CHE	CK AMOUNT	CHECK DATE	CHECK NUMBER	
TOWN AND THE PRODUCTION OF THE	TITLE					
				OFFICE HAR	l V	
SIGNATURE	DATE	Log	ged in By	OFFICE USE ON Date R	ILY . ecelved	
		. 1000000				

## **INSTRUCTIONS**

FORM: DRY CLEANER REGISTRATION

This is a **REQUIRED** form for all dry cleaning facilities. A separate Dry Cleaner Registration form must be completed for each facility. In other words, if you own more than one dry cleaner operation at different locations, a form must be completed for each location. If your dry cleaner is a drop off location only and no solvent is used at that location, then please return this form indicating that situation exists.

**Facility Name:** Enter the official company name and/or plant designation for the facility that is submitting this form if not already preprinted. This name will usually be the same as on the mailing label. If your official company name has changed in the calendar year of record, please enter the new name in the box. This official facility name must be entered on every form submitted.

Facility Street Address, City and ZIP Code: The street address is the physical location of the facility.

<u>Facility Mailing Address</u>, <u>City and ZIP Code</u>: The mailing address should be entered if the mailing address of the facility is different from the street address.

**Facility Contact Person:** The facility contact is the person most familiar with the operations of the plant and who should answer any questions regarding information about the facility. Also, list the title of the contact person.

FIPS County Number, Plant No., County Name, and Year: This information may be preprinted on the form. If any of the boxes are blank, fill in any of the known information. See the "List of Missouri Counties" in this instruction packet for appropriate FIPS (3 digits). Year is the calendar year of record starting January 1 and ending December 31. The FIPs County Number, Plant Number and Year should be entered on every form and any documentation submitted (especially checks). If you do not know your plant number, leave it blank and the Air Pollution Control personnel will assign one.

<u>Facility Phone Number</u>: The facility phone number is the telephone number where the contact person can be reached on property.

**PROPERTY OWNER INFORMATION:** Enter the name and mailing address of the legal owner(s) of the property. Also enter the address and phone number where this individual can be reached. (This is not the business owner unless the business owner is also the property owner).

<u>Gallons on Hand from Previous Year</u>: Enter how much solvent, in gallons, that was remaining in the machines or in storage at the beginning of the calendar year. This will include solvent in the machines' storage tanks and unused solvent.

Gallons Brought on Site During the Calendar Year: Enter how much solvent, in gallons, was brought on-site during the calendar year.

Gallons Sent Off-site Unused: Report only the number of unopened containers shipped to a different location. (The solvent in sludge and filters will be calculated in the Emissions Fee section.)

Gallons On-Hand at End of Calendar Year: Enter the amount of solvent, in gallons, that was remaining at the facility on December 31 of the calendar year. This will include the solvent in the machines and the solvent in storage.

Total Gallons Used during the Calendar Year: Add the gallons on hand from previous year and the gallons brought on site during the calendar year. Subtract gallons sent off-site unused and the gallons on hand at the end of the calendar year. The number resulting from adding and subtracting will determine the Registration Surcharge. This number will also be used as the variable "a" in the emissions calculation.

<u>CALCULATE REGISTRATION SURCHARGE</u>: Place an "X" in the appropriate box that represents the total gallons of solvent used as calculated in the previous section. A separate check to the Hazardous Waste Program is required for the Dry Cleaner Registration Surcharge. Local air emissions fees should not be deducted from the amount of the Dry Cleaner Registration Surcharge.

<u>CALCULATE AIR EMISSIONS FEE (APCP)</u>: The equation shown in this block will determine the actual emissions for the facility. Use the formula to calculate the tons of emissions at your facility. The variable "a" was determined previously. See the examples following the instructions to determine values for "b" and "c". Insert the appropriate number for each variable and perform the calculation. Insert the calculated value in box 1. The densities of two common solvents are listed below and on the Dry Cleaner Registration Form.

## Perchloroethylene Density = 13.547 pounds per gallon Petroleum Stoddard Density = 6.316 pounds per gallon

Report the actual emissions in Box 1 to two places (the nearest hundredth).

Total Annual Emissions Fee: Multiply the rounded amount in Box 1 by \$31.00 (any amount between zero and one ton must be rounded to 1 ton) and put this amount in Box 2. (Two dry cleaner examples follow these instructions.)

Instructions for Dry Cleaner Registration Form Continued

<u>Certification</u>: The last two lines on the page are to be completed by the person completing the form and by an authorized company representative. Include their titles in the blocks also. <u>Both signature blocks must be signed</u>; unsigned Dry Cleaner Registrations will <u>NOT</u> be accepted.

<u>Check Amount, Check Number, and Check Date:</u> Fill in your company's check information. Separate checks must be included for each applicable fee. Make check for registration surcharge to the "Missouri Hazardous Waste Program." Make check for air emissions to the "Missouri Air Pollution Control Program."

*NOTE:* Requests for EIQ confidentiality must be submitted annually in letter format, signed by an authorized company representative.

## **EXAMPLES**

**Dog Gone Cleaners**: This facility had 150 gallons of stoddard left over from year 2000. They purchased 1350 gallons during the calendar year (2001). 100 gallons were at the facility at the end of the year. Filters were changed weekly (52 filters). The owner or the facility determined that each filter contained 0.15 gallons of the original solvent in each filter (the conversion factor-how it was determined is explained below). The filters were disposed of properly. 430 gallons sludge was shipped off-site. 25 gallons of solvent were sent to a sister dry cleaner that had run short and needed to acquire the solvent to operate. The dryer capacity on the machine is greater than 38 kilograms (84 pounds), therefore an emissions fee is required.

The variables are all identified now:

150 gallons from previous year

1350 gallons brought on site during calendar year

100 gallons on site at the end of calendar year

25 gallons unused solvent shipped off-site

0.15 gallons per filter x 52 filters = 7.8 gallons solvent disposed of in filters

0.1 gallons solvent per gallon sludge x 430 gallons sludge

43 gallons solvent disposed of as sludge

DENSITY OF STODDARD = 6.316 pounds per gallons

Add the amount on hand at the beginning of the year (150 gallons) and the amount brought on site (1350 gallons). Subtract what was shipped off-site unused (25 gallons) and what was left at the end of the year (100 gallons)

150 + 1350 - 25 - 100 = 1375 gallons of stoddard

The Registration Surcharge amount will be \$500 because the amount of non-chlorinated solvent (stoddard) used falls between 0 - 1,400 gallons.

To calculate the amount of emissions, take the total gallons used (1375 gallons) and subtract filter solvent (7.8 gallons) and sludge solvent (43 gallons). Multiply this number by the density and divide by 2000.

(Continued on next page)

Instructions for Dry Cleaner Registration Form Continued

 $(1375 - 7.8 - 43) \times 6.316 / 2000 = 4.18$ tons of emissions

Round 4.18 to the nearest ton and multiply by \$31.00 to get \$124.00 as the emissions fee.

To find the conversion factor for a filter we use a mass balance method to calculate an approximate factor. Weight of a dry, unused filter is subtracted from the weight of a typical filter that has been used and is ready for disposal. This difference in weight is multiplied by 0.1 and then divided by the density of the solvent used. In this particular example 40-pound filters are used and the typical used filter weighs 49.5 pounds.  $(49.5-40) \times 0.1/6.316 = 0.15$  gallons of solvent per filter

**Day Lite Laundry:** 280 gallons of perchloroethylene were purchased for this facility during the calendar year. 55 gallons were left at the end of the previous year and 75 gallons were left at the end of the calendar year. The facility ships filters off-site twice a month (24 filters for the year) with approximately 0.25 gallons of solvent in each (0.25 is the conversion factor). They also shipped 120 gallons of sludge off-site. No unopened containers were returned to the supplier.

The variables are all identified now:

55 gallons from previous year

280 gallons brought on site during calendar year

75 gallons on site at the end of calendar year

0 gallons sent off-site unused

24 filters x 0.25 gallons per filter = 6 gallons solvent disposed of in filters

120 gallons of sludge x 0.1 gallons of solvent per gallon of sludge = 12 gallons solvent disposed of in sludge

DENSITY OF SOLVENT = 13.547 pounds per gallons

55 + 280 - 75 = 260 gallons of perchloroethylene

Registration Surcharge is \$1,000 because total gallons of the perchloroethylene fell between 141 and 360 gallons of chlorinated solvent.

 $(260-6-12) \times 13.547 / 2000 = 1.64$  tons of emissions

The emission fee is \$62.00

The conversion factor for this facility was calculated by subtracting the dry filter weight (100 pounds) from the weight of a typical used filter (134 pounds). This weight difference is multiplied by 0.1, then divided by the density of the solvent.

 $(134-100) \times 0.1 / 13.547 = 0.25$  gallons of solvent per filter